AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1-17. (Canceled)

18. (Currently Amended) A device for etching a patterned silicon body substrate [(10)] with a plasma [(14)], comprising:

a high-frequency generator;

a plasma source [(13)] for generating a high-frequency electromagnetic alternating field [power], a high frequency power to be applied to the plasma source with assistance of [a] the high-frequency generator [(17)];

a reactor [(15)] for generating the plasma [(14)] from reactive particles through [the] an action of the high-frequency electromagnetic alternating field upon one of a reactive gas [or] and a reactive gas mixture; and

a first [means] arrangement for producing a periodical change in the high-frequency power applied to the plasma source [(13)];

wherein the first arrangement includes one of:

a component for controlling a power of the high-frequency generator, a digital ramp generator being programmed via a software in the component, and

a component for controlling the power of the high-frequency generator including an analog ramp generator.

19. (Canceled)

20. (Currently Amended) The device according to Claim [19] 18, wherein the analog ramp generator [(19)] has an RC circuit [(23, 24, 25)] which is provided with at least one diode.

21. (Currently Amended) The device according to Claim 18, further comprising a second [means] arrangement which, during the periodical change in the high-frequency power

applied to the plasma source [(13)], at least temporarily adapts [the] an output impedance of the high-frequency generator [(17)] to [the] a prevailing impedance of the plasma source [(13)] which changes as a function of the high-frequency power.

22. (Currently Amended) The device according to Claim 21, wherein:

the adaptation of the output impedance is carried out one of continuously [or] and stepwise and is automated; and [wherein]

the applied high-frequency power lies between 400 W and 5000 W.

23. (Currently Amended) The device according to Claim 21, wherein the second [means] arrangement is an impedance transformer [(16)].

24. (Currently Amended) A method for anisotropically etching a substrate [(10)] using [the] a device for etching the substrate with a plasma [according to Claim 18], comprising the steps of:

causing a plasma source to generate a high-frequency electromagnetic alternating field, a high-frequency generator being adapted to apply a high-frequency power to the plasma source;

causing a reactor to generate the plasma from reactive particles through an action of the high-frequency electromagnetic alternating field upon one of a reactive gas and a reactive gas mixture;

causing a first arrangement to produce a periodical change in the high-frequency power applied to the plasma source by one of:

operating a component for controlling a power of the high-frequency generator via a software-programmed digital ramp generator, and

operating a component including an analog ramp generator and for controlling the power of the high-frequency generator;

carrying out the anisotropic etching process in separate etching and polymerization steps alternatingly following each other[,]; and

applying a polymer to lateral patterns defined by an etching mask during the polymerization steps, the polymer being removed again in each case during the subsequent etching steps[,];

wherein, during the etching steps, at least temporarily, and in each case higher high-frequency power is applied to the plasma source [(13)] than during the deposition steps.

25. (Currently Amended) The method according to Claim 24, wherein during the etching steps, at least temporarily, a high-frequency power of 800 watts to 5000 watts [, in particular, of 2000 watts to 4000 watts] is applied to the plasma source [(13)], and during the deposition steps, at least temporarily, a high-frequency power of 400 watts to 1500 watts [, in particular, of 500 to 1000 watts] is applied to the plasma source.

26. (Currently Amended) The method according to Claim 24, wherein at least one of:

[the] an increase in the high-frequency power during [the] a change from the deposition steps to the etching steps is carried out one of stepwise and continuously; and [or]

[the] a decrease in the high-frequency power during the change from the etching steps to the deposition steps [are] is carried out one of stepwise [or] and continuously.

27. (Currently Amended) The method according to Claim 26, wherein at least the increase in the high-frequency power is carried out in such a manner that during this time, at least temporarily, [the] an impedance of the high-frequency generator [(17)] is adapted to [the] a plasma impedance at least approximately in (a) one of a [, in particular,] continuous [or] and stepwise, and (b) an automated manner via [the] a second arrangement [means, in particular, via the impedance transformer (16)].

28. (Currently Amended) The method according to Claim 26, wherein at least one of:

a [the] duration of the increase in the high-frequency power during the change from [a] the deposition [step] steps to [an] the etching [step] steps is 0.2 sec to 5 sec [, in particular, 0.5 sec to 3 sec]; and

a [and/or that the] duration of the decrease in the high-frequency power during the change from [an] the etching [step] steps to [a] the deposition [step] steps is 0 sec to 2 sec [, in particular, 0 sec to 0.5 sec].

29. (Withdrawn) A device for igniting a plasma (14) and for adjusting upward or pulsing a plasma power, comprising: an inductive plasma source (13), for generating a high-frequency electromagnetic alternating field, it being possible for a high-frequency power to be applied to the plasma source with the assistance of a high-frequency generator (17); a reactor (15) for generating the plasma (14) from reactive particles through the action of the high-frequency electromagnetic alternating field upon a reactive gas or a reactive gas mixture; and a means which permits adjustment of a continuous or stepwise increase in the high-frequency power applied to the plasma source (13), starting from a starting value, to a target value.

30. (Withdrawn) The device according to Claim 29, wherein the means is: a component for controlling the power of the high-frequency generator (17) in which component a digital ramp generator is programmed via a software, or a component (18) for controlling the power of the high-frequency generator (17) which component has an analog ramp generator (19).

31. (Withdrawn) The device according to Claim 29, further comprising an impedance transformer (16) which, during the increase in the high-frequency power, at least temporarily, adapts the output impedance of the high-frequency generator (17) to the prevailing impedance of the plasma source (13) in a an, in particular continuous or stepwise and automated manner, the impedance of the plasma source changing as a function of the high-frequency power.

32. (Withdrawn) A method for igniting a plasma (14) and for adjusting upward a plasma power using the device according to Claim 29, wherein the continuous or stepwise increase in the high-frequency power from the starting value to the target value is accompanied by an at least temporary impedance adaptation of the high-frequency generator (17) to the prevailing plasma impedance via the second means, in particular, via the impedance transformer (16).

33. (Withdrawn) The method according to Claim 32, wherein the starting value is 0 to 400 watts and the target value is 800 watts to 5000 watts, and wherein the increase of the starting value to the target value is carried out over a period of 0.2 sec to 5 sec, in particular, 0.5 to 2 sec.

34. (Withdrawn) The method according to Claim 32, wherein the plasma (14) is ignited and adjusted upward in a time-pulsed manner.

35. (New) The method according to Claim 25, wherein during the etching steps the high-frequency power is between 2000 watts and 4000 watts

36. (New) The method according to Claim 25, wherein during the deposition steps the high-frequency power is between 500 watts to 1000 watts.

37. (New) The method according to Claim 27, wherein the second arrangement includes an impedance transformer.

38. (New) The method according to Claim 28, wherein the duration of the increase in the high-frequency power during the change from the deposition steps to the etching steps is 0.5 sec to 3 sec.

39. (New) The method according to Claim 28, wherein the duration of the decrease in the high-frequency power during the change from the etching steps to the deposition steps is 0 sec to 0.5 sec.

40. (New) A device for etching a substrate with a plasma, comprising:

a plasma source adapted to generate a high-frequency electromagnetic alternating field;

a high-frequency generator adapted to apply a high-frequency power to the plasma source;

a reactor adapted to generate the plasma from reactive particles by the high-frequency electromagnetic alternating field acting on one of a reactive gas and a reactive gas mixture; and

a first arrangement adapted to produce a periodical change in the high-frequency power applied to the plasma source, the first arrangement being a component for controlling a power of the high-frequency generator, the component including one of a digital ramp generator programmed via a software and an analog ramp generator.